

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

|                                  |  |
|----------------------------------|--|
| <b>Product Description:</b>      | <b><u>Ethyl acetate</u></b>            |
| <b>Cat No. :</b>                 | <b>364240000, 364240010, 364240025</b> |
| <b>Synonyms</b>                  | Acetic acid ethyl ester                |
| <b>Index No</b>                  | 607-022-00-5                           |
| <b>CAS No</b>                    | 141-78-6                               |
| <b>EC No</b>                     | 205-500-4                              |
| <b>Molecular Formula</b>         | C4 H8 O2                               |
| <b>REACH registration number</b> | -                                      |

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

|                                       |   |
|---------------------------------------|---|
| <b>Recommended Use</b>                | Laboratory chemicals.   |
| <b>Sector of use</b>                  | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites    |
| <b>Product category</b>               | PC21 - Laboratory chemicals   |
| <b>Process categories</b>             | PROC15 - Use as a laboratory reagent  |
| <b>Environmental release category</b> | ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) |
| <b>Uses advised against</b>           | No Information available  |

### 1.3. Details of the supplier of the safety data sheet

#### Company

**UK entity/business name**  
Fisher Scientific UK  
Bishop Meadow Road,  
Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name**  
Thermo Fisher Scientific  
Janssen Pharmaceuticaaan 3a, 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

### 1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567**

**Physical hazards**

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

|  |                   |
|--|-------------------|
| Flammable liquids  | Category 2 (H225) |
| <b>Health hazards</b>  |                   |
| Serious Eye Damage/Eye Irritation                                | Category 2 (H319) |
| Specific target organ toxicity - (single exposure)               | Category 3 (H336) |
| <b>Environmental hazards</b>                                     |                   |
| Based on available data, the classification criteria are not met |                   |

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

- H225 - Highly flammable liquid and vapor
- H319 - Causes serious eye irritation
- H336 - May cause drowsiness or dizziness
- EUH066 - Repeated exposure may cause skin dryness or cracking

## Precautionary Statements

- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P240 - Ground and bond container and receiving equipment
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

## 2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component     | CAS No   | EC No             | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|---------------|----------|-------------------|----------|---|
| Ethyl acetate | 141-78-6 | EEC No. 205-500-4 | <=100    | Flam. Liq. 2 (H225)<br>Eye Irrit. 2 (H319)  |

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

|  |  |  |  |                            |
|--|--|--|--|----------------------------|
|  |  |  |  | STOT SE 3 (H336)<br>EUH066 |
|--|--|--|--|----------------------------|

|                                  |   |
|----------------------------------|---|
| <b>REACH registration number</b> | - |
|----------------------------------|---|

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|   |  |
|---|--|
| <b>General Advice</b>                     | If symptoms persist, call a physician.   |
| <b>Eye Contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.                                  |
| <b>Skin Contact</b>                       | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.                                |
| <b>Ingestion</b>                          | Clean mouth with water and drink afterwards plenty of water.   |
| <b>Inhalation</b>                         | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.                                     |
| <b>Self-Protection of the First Aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |

### 4.2. Most important symptoms and effects, both acute and delayed

Difficulty in breathing. May cause central nervous system depression: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

### 4.3. Indication of any immediate medical attention and special treatment needed

|                           |   |
|---------------------------|---|
| <b>Notes to Physician</b> | Treat symptomatically. Symptoms may be delayed. |
|---------------------------|---|

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

#### **Extinguishing media which must not be used for safety reasons**

Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

### 5.3. Advice for firefighters

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation.

### 6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

### 7.2. Conditions for safe storage, including any incompatibilities

Flammables area. Keep away from heat, sparks and flame. Keep container tightly closed in a dry and well-ventilated place.

**Technical Rules for Hazardous Substances (TRGS) 510**      Class 3  
**Storage Class (LGK) (Germany)**

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### **Exposure limits**

List source(s): **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority      **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

| Component     | The United Kingdom  | European Union  | Ireland   |
|---------------|---|---|---|
| Ethyl acetate | STEL: 1468 mg/m <sup>3</sup> 15 min<br>STEL: 400 ppm 15 min<br>TWA: 734 mg/m <sup>3</sup> 8 hr<br>TWA: 200 ppm 8 hr | TWA: 734 mg/m <sup>3</sup> (8h)<br>TWA: 200 ppm (8h)<br>STEL: 1468 mg/m <sup>3</sup> (15min)<br>STEL: 400 ppm (15min) | TWA: 734 mg/m <sup>3</sup> 8 hr.<br>TWA: 200 ppm 8 hr.<br>STEL: 1468 mg/m <sup>3</sup> 15 min<br>STEL: 400 ppm 15 min |

### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component                           | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|-------------------------------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Ethyl acetate<br>141-78-6 ( <=100 ) |                              |                                 |                                | DNEL = 63mg/kg bw/day             |

| Component                           | Acute effects local (Inhalation)         | Acute effects systemic (Inhalation)      | Chronic effects local (Inhalation)      | Chronic effects systemic (Inhalation) |
|-------------------------------------|--|--|---|---------------------------------------|
| Ethyl acetate<br>141-78-6 ( <=100 ) | DNEL = 1468 mg/m <sup>3</sup><br>400 ppm | DNEL = 1468 mg/m <sup>3</sup><br>400 ppm | DNEL = 734 mg/m <sup>3</sup><br>200 ppm | DNEL = 734mg/m <sup>3</sup>           |

### Predicted No Effect Concentration (PNEC)

See values below.

| Component                           | Fresh water     | Fresh water sediment         | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture)        |
|-------------------------------------|-----------------|------------------------------|--------------------|------------------------------------|---------------------------|
| Ethyl acetate<br>141-78-6 ( <=100 ) | PNEC = 0.24mg/L | PNEC = 1.15mg/kg sediment dw | PNEC = 1.65mg/L    | PNEC = 650mg/L                     | PNEC = 0.148mg/kg soil dw |

| Component                           | Marine water     | Marine water sediment         | Marine water intermittent | Food chain          | Air |
|-------------------------------------|------------------|-------------------------------|---------------------------|---------------------|-----|
| Ethyl acetate<br>141-78-6 ( <=100 ) | PNEC = 0.024mg/L | PNEC = 0.115mg/kg sediment dw |                           | PNEC = 0.2g/kg food |     |

## 8.2. Exposure controls

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

#### Eye Protection

Goggles (European standard - EN 166)

#### Hand Protection

Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard    | Glove comments  |
|----------------|-------------------|-----------------|----------------|---|
| Butyl rubber   | > 120 minutes     | 0.5 - 0.7 mm    | EN 374 Level 4 | Permeation rate 8 µg/cm <sup>2</sup> /min<br>As tested under EN374-3 Determination of Resistance to Permeation by Chemicals |
| Nitrile rubber | < 200 minutes     |                 |                |   |
| PVA            | > 360 minutes     | 0.3 mm          |                |   |

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

|                                 |                        |         |
|---------------------------------|------------------------|---------|
| Nitrile rubber                  | < 30 minutes           | 0.38 mm |
| <b>Skin and body protection</b> | Long sleeved clothing. |         |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

## Respiratory Protection

No protective equipment is needed under normal use conditions.

## Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

## Small scale/Laboratory use

Maintain adequate ventilation

## Environmental exposure controls

No information available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|  |   |                                 |
|--|---|---------------------------------|
| <b>Physical State</b>                          | Liquid                                      |                                 |
| <b>Appearance</b>                              | Colorless                                   |                                 |
| <b>Odor</b>                                    | sweet                                       |                                 |
| <b>Odor Threshold</b>                          | 50 ppm                                      |                                 |
| <b>Melting Point/Range</b>                     | -83.5 °C / -118.3 °F                        |                                 |
| <b>Softening Point</b>                         | No data available                           |                                 |
| <b>Boiling Point/Range</b>                     | 75 - 78 °C / 167 - 172.4 °F                 |                                 |
| <b>Flammability (liquid)</b>                   | Highly flammable                            | On basis of test data           |
| <b>Flammability (solid,gas)</b>                | Not applicable                              | Liquid                          |
| <b>Explosion Limits</b>                        | <b>Lower</b> 2 Vol%<br><b>Upper</b> 12 Vol% |                                 |
| <b>Flash Point</b>                             | -4 °C / 24.8 °F                             | <b>Method</b> - CC (closed cup) |
| <b>Autoignition Temperature</b>                | 427 °C / 800.6 °F                           |                                 |
| <b>Decomposition Temperature</b>               | No data available                           |                                 |
| <b>pH</b>                                      | No information available                    |                                 |
| <b>Viscosity</b>                               | 0.45 cP @ 20 °C                             | Dynamic<br>20 °C                |
| <b>Water Solubility</b>                        | 80 g/l                                      |                                 |
| <b>Solubility in other solvents</b>            | Miscible Alcohol acetone                    |                                 |
| <b>Partition Coefficient (n-octanol/water)</b> |   |                                 |
| <b>Component</b>                               | <b>log Pow</b>                              |                                 |
| Ethyl acetate                                  | 0.73  |                                 |
| <b>Vapor Pressure</b>                          | 103 mbar @ 20°C                             |                                 |
| <b>Density / Specific Gravity</b>              | 0.902                                       | @ 20 °C                         |
| <b>Bulk Density</b>                            | Not applicable                              | Liquid                          |
| <b>Vapor Density</b>                           | 3.04  | (Air = 1.0)                     |
| <b>Particle characteristics</b>                | Not applicable (liquid)                     |                                 |

### 9.2. Other information

|                             |   |
|-----------------------------|---|
| <b>Molecular Formula</b>    | C4 H8 O2  |
| <b>Molecular Weight</b>     | 88.11   |
| <b>Explosive Properties</b> | Not explosive Vapors may form explosive mixtures with air |

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

|                             |   |
|-----------------------------|---|
| <b>Oxidizing Properties</b> | Not oxidising (based on the chemical structure of the substance and oxidation states of the constituent elements) |
| <b>Evaporation Rate</b>     | 6.2 - (Butyl Acetate = 1.0)   |
| <b>Surface tension</b>      | 24 mN/m @ 20°C  |

## SECTION 10: STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>10.1. Reactivity</b>                         | None known, based on information available   |
| <b>10.2. Chemical stability</b>                 | Stable under normal conditions.  |
| <b>10.3. Possibility of hazardous reactions</b> |  |
| <b>Hazardous Polymerization</b>                 | Hazardous polymerization does not occur.   |
| <b>Hazardous Reactions</b>                      | None under normal processing.  |
| <b>10.4. Conditions to avoid</b>                | Incompatible products. Keep away from open flames, hot surfaces and sources of ignition. |
| <b>10.5. Incompatible materials</b>             | Strong oxidizing agents. Strong acids. Amines. Peroxides.                                |
| <b>10.6. Hazardous decomposition products</b>   | Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).                                 |

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Product Information

|                            |  |
|----------------------------|--|
| <b>(a) acute toxicity;</b> |  |
| <b>Oral</b>                | Based on available data, the classification criteria are not met |
| <b>Dermal</b>              | Based on available data, the classification criteria are not met |
| <b>Inhalation</b>          | Based on available data, the classification criteria are not met |

| Component     | LD50 Oral            | LD50 Dermal                                       | LC50 Inhalation    |
|---------------|----------------------|---|--------------------|
| Ethyl acetate | 10,200 mg/kg ( Rat ) | > 20 mL/kg ( Rabbit )<br>> 18000 mg/kg ( Rabbit ) | 58 mg/l (rat; 8 h) |

|                                       |  |
|---------------------------------------|--|
| <b>(b) skin corrosion/irritation;</b> | Based on available data, the classification criteria are not met |
| <b>Test method</b>                    | OECD 404   |
| <b>Test species</b>                   | rabbit   |
| <b>Observational endpoint</b>         | No skin irritation   |

|   |                    |
|---|--------------------|
| <b>(c) serious eye damage/irritation;</b> | Category 2         |
| <b>Test method</b>                        | OECD 405           |
| <b>Test species</b>                       | rabbit eye         |
| <b>Observation end point</b>              | Irritating to eyes |

|   |  |
|---|--|
| <b>(d) respiratory or skin sensitization;</b> |  |
| <b>Respiratory</b>                            | Based on available data, the classification criteria are not met |

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

**Skin** Based on available data, the classification criteria are not met

| Component                           | Test method             | Test species | Study result      |
|-------------------------------------|-------------------------|--------------|-------------------|
| Ethyl acetate<br>141-78-6 ( <=100 ) | OECD Test Guideline 406 | guinea pig   | - non-sensitising |

**(e) germ cell mutagenicity;** Based on available data, the classification criteria are not met

| Component                           | Test method   | Test species          | Study result |
|-------------------------------------|---|-----------------------|--------------|
| Ethyl acetate<br>141-78-6 ( <=100 ) | OECD Test Guideline 471<br>AMES test                    | in vitro<br>Bacteria  | negative     |
|                                     | OECD Test Guideline 473<br>Chromosomal aberration assay | in vitro<br>Mammalian | negative     |
|                                     | OECD Test Guideline 476<br>Gene cell mutation           | in vitro<br>Mammalian | negative     |
|                                     | OECD Test Guideline 474<br>Mouse micronucleus assay     | in vivo<br>Mammalian  | negative     |

**(f) carcinogenicity;** Based on available data, the classification criteria are not met  
There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity;** Based on available data, the classification criteria are not met

| Component                           | Test method             | Test species / Duration       | Study result                       |
|-------------------------------------|-------------------------|-------------------------------|------------------------------------|
| Ethyl acetate<br>141-78-6 ( <=100 ) | OECD Test Guideline 416 | Oral<br>mouse<br>2 Generation | NOAEL =<br>26400<br>mg/kg bw/day   |
|                                     | OECD Test Guideline 414 | Inhalation<br>Rat             | NOAEC =<br>73300 mg/m <sup>3</sup> |

**(h) STOT-single exposure;** Category 3  
**Results / Target organs** Central nervous system (CNS).

**(i) STOT-repeated exposure;** Based on available data, the classification criteria are not met

|                                |  |                  |
|--------------------------------|--|------------------|
| <b>Test method</b>             | EPA OTS 795.2600                               | EPA OTS 798.2450 |
| <b>Test species / Duration</b> | Rat / 90 days                                  | Rat / 90 days    |
| <b>Study result</b>            | NOAEL = 900 mg/kg bw/day<br>LOAEL = 3600 mg/kg | NOEC = 1.28 mg/l |
| <b>Route of exposure</b>       | Oral   | Inhalation       |
| <b>Target Organs</b>           | None known.                                    |                  |

**(j) aspiration hazard;** Based on available data, the classification criteria are not met

**Symptoms / effects,both acute and delayed** May cause central nervous system depression. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

**11.2. Information on other hazards**

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

**SECTION 12: ECOLOGICAL INFORMATION**



# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

## 12.1. Toxicity

### Ecotoxicity effects

Do not empty into drains.

| Component     | Freshwater Fish  | Water Flea          | Freshwater Algae     |
|---------------|--|---------------------|----------------------|
| Ethyl acetate | Fathead minnow: LC50: 230 mg/l/ 96h<br>Gold orfe: LC50: 270 mg/L/48h | EC50 = 717 mg/L/48h | EC50 = 3300 mg/L/48h |

| Component     | Microtox   | M-Factor |
|---------------|--|----------|
| Ethyl acetate | EC50 = 1180 mg/L 5 min<br>EC50 = 1500 mg/L 15 min<br>EC50 = 5870 mg/L 15 min<br>EC50 = 7400 mg/L 2 h |          |

## 12.2. Persistence and degradability

Readily biodegradable

### Persistence

Persistence is unlikely, based on information available.

| Component                           | Degradability            |
|-------------------------------------|--------------------------|
| Ethyl acetate<br>141-78-6 ( <=100 ) | 79 % (20 d) (OECD 301 D) |

## 12.3. Bioaccumulative potential

Bioaccumulation is unlikely

| Component     | log Pow | Bioconcentration factor (BCF) |
|---------------|---------|-------------------------------|
| Ethyl acetate | 0.73    | 30 dimensionless              |

## 12.4. Mobility in soil

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will likely be mobile in the environment due to its volatility. Disperses rapidly in air

### Surface tension

24 mN/m @ 20°C

## 12.5. Results of PBT and vPvB assessment

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

## 12.6. Endocrine disrupting properties

### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## 12.7. Other adverse effects

### Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance

This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste from Residues/Unused Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

#### Contaminated Packaging

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

#### European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

## Other Information

Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with local regulations.

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

**14.1. UN number** UN1173  
**14.2. UN proper shipping name** ETHYL ACETATE  
**14.3. Transport hazard class(es)** 3  
**14.4. Packing group** II

### ADR

**14.1. UN number** UN1173  
**14.2. UN proper shipping name** ETHYL ACETATE  
**14.3. Transport hazard class(es)** 3  
**14.4. Packing group** II

### IATA

**14.1. UN number** UN1173  
**14.2. UN proper shipping name** ETHYL ACETATE  
**14.3. Transport hazard class(es)** 3  
**14.4. Packing group** II

**14.5. Environmental hazards** No hazards identified  
**14.6. Special precautions for user** No special precautions required.  
**14.7. Maritime transport in bulk according to IMO instruments** Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component     | CAS No   | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|---------------|----------|-----------|--------|-----|-------|------|----------|------|------|
| Ethyl acetate | 141-78-6 | 205-500-4 | -      | -   | X     | X    | KE-00047 | X    | X    |

| Component     | CAS No   | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|---------------|----------|------|---|-----|------|------|-------|-------|
| Ethyl acetate | 141-78-6 | X    | ACTIVE  | X   | -    | X    | X     | X     |

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

### Authorisation/Restrictions according to EU REACH

ACR36424

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

| Component     | CAS No   | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---------------|----------|---|---|---|
| Ethyl acetate | 141-78-6 | -   | Use restricted. See item 75.<br>(see link for restriction details)            | -   |

**REACH links**

<https://echa.europa.eu/substances-restricted-under-reach>

**Seveso III Directive (2012/18/EC)**

| Component     | CAS No   | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|---------------|----------|---|--|
| Ethyl acetate | 141-78-6 | Not applicable  | Not applicable   |

**Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals**

Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

**National Regulations**

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

**WGK Classification**

See table for values

| Component     | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|---------------|---------------------------------------|-------------------------|
| Ethyl acetate | WGK1                                  |                         |

| Component     | France - INRS (Tables of occupational diseases)      |
|---------------|--|
| Ethyl acetate | Tableaux des maladies professionnelles (TMP) - RG 84 |

| Component                           | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure |
|-------------------------------------|--|---|---|
| Ethyl acetate<br>141-78-6 ( <=100 ) |  | Group I   |   |

**15.2. Chemical safety assessment**

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

A Chemical Safety Assessment/Report (CSA/CSR) has been conducted by the manufacturer/importer

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H225 - Highly flammable liquid and vapor  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness  
EUH066 - Repeated exposure may cause skin dryness or cracking

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

### Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Chemical incident response training.

**Creation Date** 13-Oct-2009

**Revision Date** 24-Nov-2023

**Revision Summary** Not applicable.

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

# SAFETY DATA SHEET

Ethyl acetate

Revision Date 24-Nov-2023

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materials or in any process, unless specified in the text

**End of Safety Data Sheet**